

NEUROSURGERY MINI OSCE /2ND GROUP

Q1. Brain Tumor (Meningioma)

1. Which of the following is TRUE regarding this tumor?

- A) Rapidly growing tumor
- B) Slow growing
- C) Arises from oligodendrocytes
- D) Commonly metastatic

Answer: B

2. Which radiological sign is most characteristic?

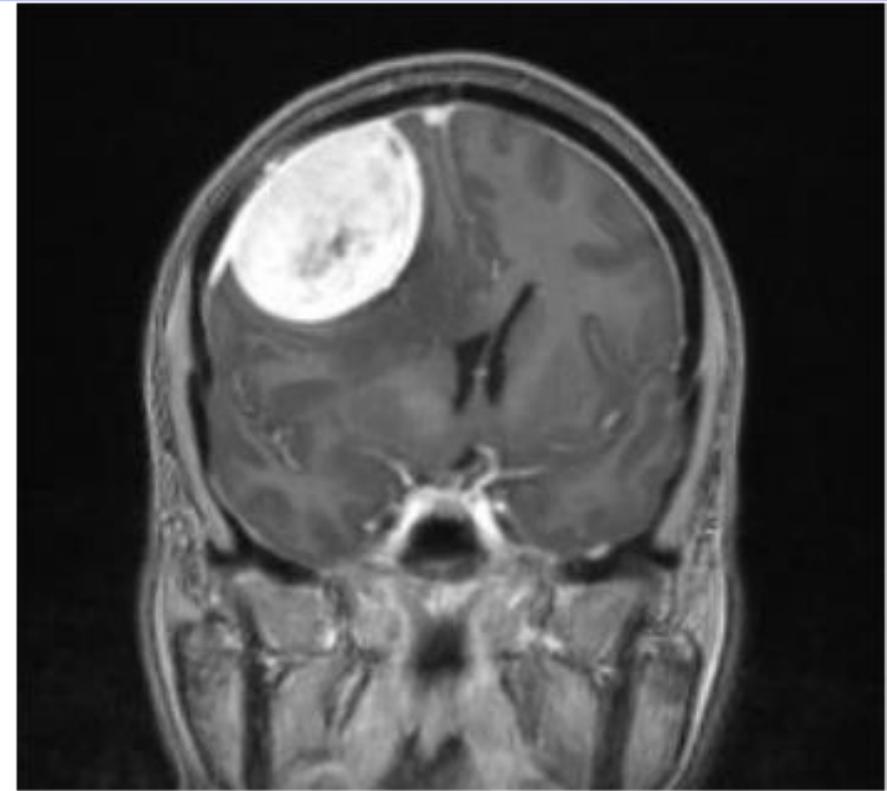
- A) Ring enhancement
- B) Dural tail sign
- C) Butterfly lesion
- D) Calcified pineal mass

Answer: B

3. What is the best method for grading tumors?

- CT scan
- B) MRI
- C) Surgical biopsy/Histopathology
- D) PET scan

Answer: C



4. Which histological finding is typical of this tumor?

- A) Rosenthal fibers
- B) Psammoma bodies
- C) Reed–Sternberg cells
- D) Homer-Wright rosettes

Answer: B

Q2. (astrocytoma)

1. According to the WHO classification, what is the grade of this tumor?

- A) WHO grade I
- B) WHO grade II
- C) WHO grade III
- D) WHO grade IV

Answer: A

2. Which histopathological finding is most characteristic of this tumor?

- A) Rosenthal fibers
- B) Psammoma bodies
- C) Homer Wright rosettes
- D) Reed-Sternberg cells

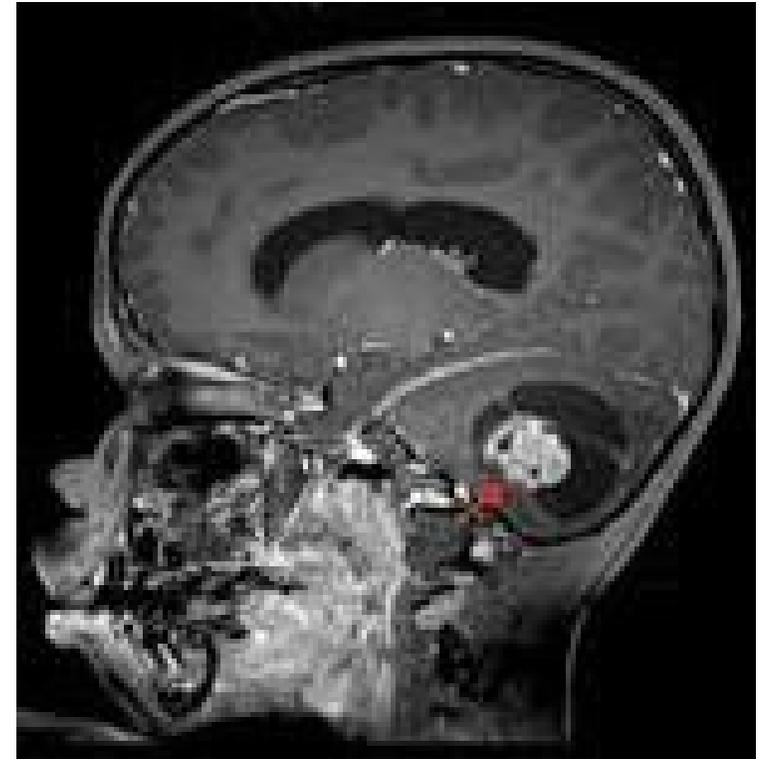
Answer: A

3. What is the best method for grading?

- A) CT brain
- B) MRI brain with contrast
- C) Surgical biopsy and histopathology
- D) CSF cytology

Answer: C

4 was removed



Q3. CT SCAN (subdural hematoma):

manisbrought to the ER after a fall. On arrival: one eye opens spontaneously and the other I doesn't respond to light (fixed)
Produces inappropriate words Localizes pain with motor response and this is his CT brain:

1. What is the patient's Glasgow Coma Scale (GCS)?

- A) 9
- B) 10
- C) 12
- D) Anisocoria

Answer: C

2. Which of the following is NOT a feature of this photo?

- A) Crescent-shaped on CT
- B) Crosses suture lines
- C) Crosses midline
- D) Can occur in elderly after minor trauma

Answer: C

3. What is the initial investigation in the emergency setting?

- A) MRI brain with contrast
- B) CT scan without contrast
- C) Lumbar puncture
- D) CT scan with contrast

Answer: B



4. What is the management of a large subdural hematoma with midline shift?

- A) Observation
- B) Mannitol only
- C) Surgical evacuation
- D) High-dose steroids

Answer: C

Q4: Intracranial Pressure Curve

1. What is the mechanism of autoregulation in curve A:

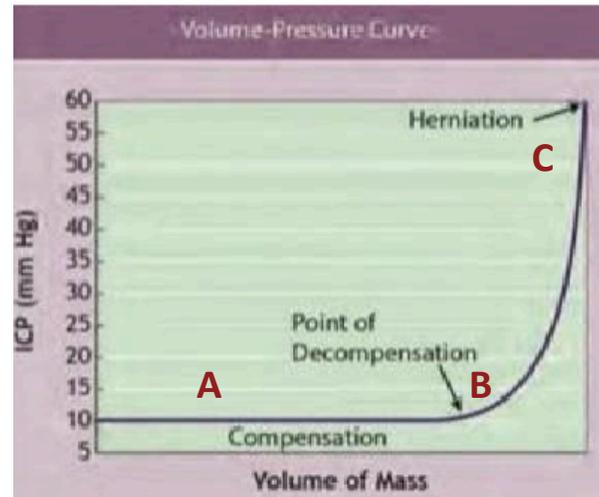
- A) By CSF absorption and venous drainage
- B) vasoconstriction
- C) Vasodilation
- D) By brain parenchyma and arterial blood

Answer: A

2. The patient develops ptosis and a dilated pupil on the right side. Which cranial nerve is injured?

- A) Right optic nerve
- B) Right oculomotor nerve
- C) Left oculomotor nerve
- D) Left optic nerve.

Answer: B



3. What type of herniation is most likely?

- A) Tonsillar herniation
- B) Uncal herniation
- C) Subfalcine herniation

Answer: B

4. Point B on the ICP-volume curve represents:

- A) Compensation
- B) Herniation
- C) Decomensation
- D) Normal ICP

Answer: C

Q5. SCI

A 19-year-old male suffered a high-speed vehicular accident. He is unable to move his lower limbs. BP = 90/65 mmHg, pulse = 45 bpm. On examination, minimal voluntary movement in lower limb (1/5), full power in upper limb except elbow extension and hand grasp. Sensation absent from chest down. CT cervical spine is shown.

1. What is the most likely type of fracture?

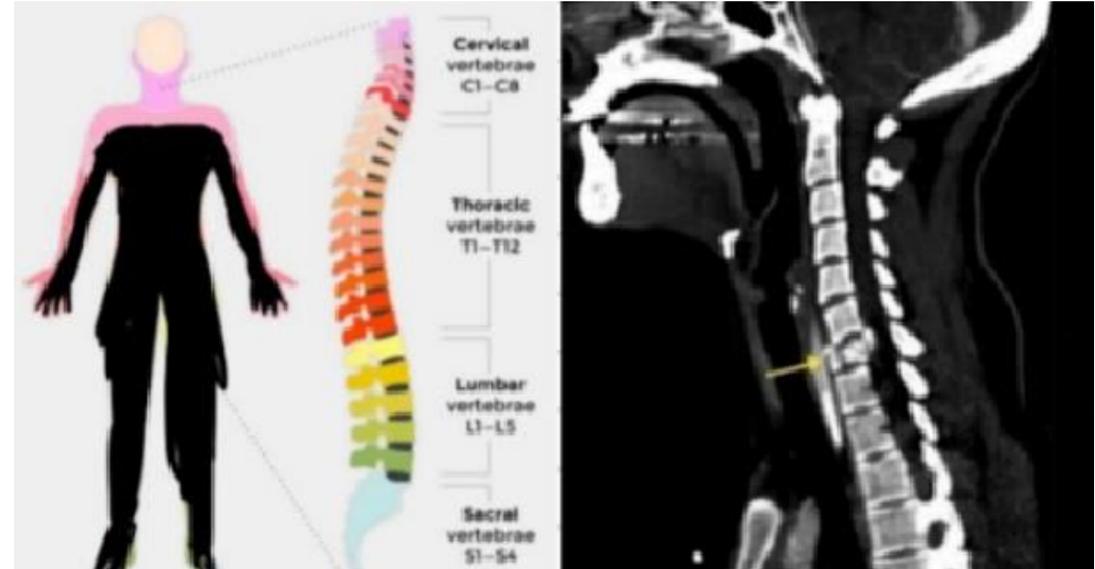
- A) Jefferson fracture
- B) Burst fracture
- C) Hangman's fracture
- D) Clay-shoveler's fracture

Answer: B

2. What is the most likely spinal level of injury?

- A) C5
- B) T7
- C) C7
- D) T1

Answer: C



3. What is the cause these symptoms in this patient?

- A) Hypovolemic shock
- B) Parasympathetic activity
- C) Neurogenic shock
- D) Cushing syndrome

Answer: C

4. Based on the neurological exam, what is the ASIA classification?

- A) E
- B) A
- C) C
- D) B

Answer: C